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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/785,296	02/23/2004	Kashichi Hirota	5267-76	2082

27799 7590 03/24/2006

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SUITE 1210  
NEW YORK, NY 10176

EXAMINER

ORTIZ, ANGELA Y

ART UNIT	PAPER NUMBER
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1732

DATE MAILED: 03/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/785,296

Applicant(s)

HIROTA, KASHICHI

Examiner

Angela Ortiz

Art Unit

1732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/17/05</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Priority*

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakakibara et al., USP 4,681,712 in view of Kia et al., US 2004/0071935 A1.

The cited primary reference substantially teaches the basic claimed the basic claimed method of molding a composite plastic article comprising the steps of preheating a mold to a desired temperature, coating the mold with a resin coating layer, heating the mold to cure the resin coating layer (claim 2) and injection molding a subsequent article layer to form the final product. The mold is preheated to a temperature between the softening temperature and the melting temperature (see col. 8, lines 40-50), which is at least 50°C for epoxy or acrylic resin materials (see examples 1 and 11). The reference further teaches that the resin-coating layer is heated by hot air or by infrared radiation (see col. 8, lines 19-21). Note that the resin materials

Art Unit: 1732

comprise conventional materials used within the molding art, including urethane or epoxy resins, and acrylic resins, see col. 7, lines 20-35. The resin material forms a coating layer on a first die, which is united to a second die to form a cavity inbetween with the coating layer (see col. 8, lines 4-15). A second resin material is injection molded onto the coating layer to form a coated article. See also col. 8, lines 5-50; col. 7, lines 50-65.

The cited primary reference does not teach applying the coating in a liquid form, or use of a drying chamber for drying the coating layer.

Note, however, that the coating layer is heated after it is applied to the first die, to allow the coating material to melt and bond together, see col. 8, lines 30-38. Note that it is undesirable in the primary reference to injection mold against a wet layer; see col. 8, lines 65-68.

The added secondary reference teaches as conventional the feature of forming a textured composite article comprising the steps of forming a liquid coating layer 20 to a mold 10, and then allowing the coating layer to at least partially dry or cure (see paragraph [0030]). The coating layer comprises urethane or acrylic materials (see paragraph [0031] and [0034]). The coating layer may be partially dried (claim 3) and physically manipulated to form a textured surface [0036], and fully cured [0037]. See paragraphs 0030-0037.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the coating layer in liquid form and then provide a subsequent drying step as shown in the added reference, when performing the process

Art Unit: 1732

set forth in the primary reference, to avoid forming a defective product with a striped pattern when performing the subsequent injection molding step.

With respect to the use of a drying chamber, note that any means for drying would have been obvious to one of ordinary skill in the art at the time the invention was made, to so include for achieving the desired drying, including that set forth in the primary reference, which teaches heating by hot air or UV.

With respect to claims 5, 7, and 9, see USP 4,681,712 at col. 7, lines 40-41.

With respect to claim 4, note that movable molds are set forth in the primary reference at col. 8, lines 4-5; to so move in any direction, including vertical, is well within the level of ordinary skill in the art.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. USP's 4242410; 4282285; 4980107; 4356230; 4367192; 4477405; 4499235; 4568604.

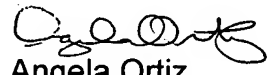
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angela Ortiz whose telephone number is 571-272-1206. The examiner can normally be reached on Monday-Thursday 9:00-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Colaianni can be reached on 571-272-1196. The fax phone

Art Unit: 1732

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Angela Ortiz  
Primary Examiner  
Art Unit 1732

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